DOCUMENT RESUME

ED 230 753 CE 036 204

AUTHOR Sheppard, N. Alan
TITLE Vocational Education Needs Assessment. Survey of Older Americans. Executive Summary.
INSTITUTION Virginia Polytechnic Inst. and State Univ., Blacksburg. Div. of Vocational-Technical Education.
PUB DATE Apr 83
NOTE 26p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Access to Education; *Adult Vocational Education; *Educational Needs; Educational Research; Irdividual Needs; Middle Aged Adults; *Needs Assessment; *Older Adults; Questionnaires; Surveys; Vocational Education

ABSTRACT

A sample of senior citizens (aged 55 and over) was surveyed to identify their interest in enrolling in different types of vocational courses and their overall educational needs in relation to sex, race, educational attainment, and preference for course location. The research methodology involved the administration of a questionnaire to 143 older adults who participate in programs or activities sponsored by senior centers in Virginia. The respondents felt, though not overwhelmingly so, that vocational education could adequately meet their educational needs, upgrade their present occupational skills, or develop new skills. Their preferences for the type of vocational course included food services and nutrition, computer programming, auto mechanics, homemaking education, carpentry, and printing. Obstacles to continued participation in formal education and educational programs identified most often were cost, age, physical condition, attitude, times of programs, and transportation problems. Senior centers were the preferences for the location of education/vocational education courses. They preferred short-term vocational training (six weeks or less), morning classes, and classes on Monday, Tuesday, or Wednesday. A significant relationship was found between their interest for different types of vocational courses and age, sex, and educational attainment. (Recommendations are made for incorporating these findings into educational planning.) (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED230753

EXECUTIVE SUMMARY:

VOCATIONAL EDUCATION NEEDS ASSESSMENT

SURVEY OF OLDER AMERICANS

Project Director:

N. Alan Sheppard, Ph. D.
Division of Vocational & Technical Education
Northern Virginia Graduate Center
Virginia Polytechnic Institute & State University
2990 Telestar Court
Falls Church, Virginia 22042

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

April, 1983

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

N A Sheppard

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE036204

ABSTRACT

This study reports on a sample of senior citizens (55 years and over) interest in enrolling in different types of vocational courses and their overall educational needs in relation to sex, race, educational attainment and preference for course location. Vocational training and placement opportunities for older persons can mean outreach services, support services and accessible institutional and community-based programs. The research findings could lead not only to the development of an approach to providing vocational education opportunities but also ways of encouraging greater use of older adults as teacher aides and resource persons in the classroom.

BACKGROUND AND DESCRIPTION OF PROBLEM SITUATION

Interest in serving the needs of older Americans has burgeoned during the past two decades. This growing interest stems from the interaction of two major social forces: intensified social consciousness exemplified by the civil rights and feminist movements and a fundamental shift in the age structure of the U.S. population. Due to a long-term decline in the fertility rate and substantial increases in life expectancy, the age structure of the U.S. populations is shifting more rapidly than was anticipated even a few years ago. It is estimated that by 1990, a cohort of 39 million Americans aged 60 or older will exist, equal in size to the numbers of Americans in their twenties and thirties (U.S. Department of Labor and the U.S. Department of Health, Education and Welfare, 1978).

An extensive review of the literature and related research indicates that very little research on the subject of vocational education and aging or the relationship between vocational education programs and needs of older Americans has been conducted (Eklund, 1969; Hiemstra, 1972, 1975,1980; Londoner, 1971; and Sheppard, 1980).

The Age Discrimination Study conducted by the U.S. Commission on Civil Rights in 1977 found discrimination on the basis of age in the delivery of Federally supported services and benefits to exist to some extent in each of the Federal programs studied. Two of the recommendations resulting from the study centered on vocational education opportunities for older adults. These were:

1. That the U.S. Office of Education (USOE), based on State and local needs assessment data, develop appropriate technical assistance to assist State vocational education agencies to work effectively with its grantees to develop vocational education programs and activities to attract and to meet the needs of older persons.

2. That failure of the State vocational education agencies to respond to this initiative be regarded as a violation of the Age Descriminiation Act and appropriate steps be taken to apply sanctions recommended in the report (U.S. Commission on Civil Rights, 1977).

In response to these recommendations, the U.S. Office of Education (USOE) in 1980 awarded a contract to a national research firm to implement a project geared to the identification of issues that relate to the role of vocational education in serving older persons. However, this effort was oriented more towards establishing a knowledge base upon which future program development could be built and how current policies and practices affect the delivery of vocational education services to older persons rather than identifying interests and needs per se.

A major study focusing on the elderly as an appropriate concern for vocational education was identified. That study (Sheppard, 1975) not only examined the appropriateness of older persons as legitimate concerns for vocational education but dealt with attitudes toward the aged as a group, attitudes of vocational educators regarding their profession and its adequacy in serving older persons in terms of priorities and resources. The results indicated:

> ... That as a group, vocational educators were concerned with the problems of the elderly and felt that these problems were a proper concern of vocational education as a profession. They were somewhat unconvinced as to the suitability of present programs of vocational education for older people. Also, these vocational educators were unsure of their potential service to the elderly and they perceived their resources to be less than optimal. Of significant importance is the fact that vocational educators felt that older persons themselves ought to be consulted with respect to how their needs can best be met...(p. 115).

The planners of vocational educational programs for older persons will probably find little success, if any, in simply developing various kinds of courses related to anticipated kaleidoscoping interests. As Peterson (1971) points out:

> ... Many older people feel that education has no reference to their lives, they only buy, with their time and dollars, what they feel they really need, and it's obvious, they don't feel they need education.

Thus, it seems very important that the interests and needs of older people be understood more clearly, especially if the scarce education dollar is to be invested wisely. Then too, faced with the anticipated shortage of the traditional student enrollment in vocational education and the need to identify new clientele, the potential of the elderly as a non-traditional clientele is encouraging. In short, an understanding of both the interests and needs of older persons should lead to more realistic and relevant vocational programming for this untapped and unused resource available in communities across the country.

NOTE. In this study the term "older adults", was used interchangeably with such terms as "older persons", "aged", "older Americans", "older people", "elderly", and "seniors", and refers to those individuals who have reached retirement age and seek additional education, further job training, and re-employment but lack readily employable skills, or those who have reached retirement age but have never worked or are under-employed due to lack of skills.

STATEMENT OF THE PROBLEM

The problem of this study was to identify the educational needs and interests of older persons, 55 and over, participating in senior center activities and examine the implications of these needs for the design and implementation of

vocational education programs by asking the following questions: What are the major problems confronting older adults as perceived by older adults? What factors (obstacles) do they perceive as limiting to their participation in educational programs? What are their preferences as to the kind of vocational/occupational course, length of training, time of day, day of week and location of the course or training? Some answers to these questions should provide information useful to vocational educators who anticipate planning new or changing current programs for older Americans.

HYPOTHESES

Several tentative hypotheses were formulated for the study based on a review of related studies (Eklund, 1969; Hiemstra, 1972, 1975, 1980; Landoner, 1971; and Sheppard, 1980). It was expected that a testing of these hypotheses and results of the study would provide a better understanding of some existing variables, prompt continued research and promote a more rigorous testing of hypotheses in subsequent research. They were as follows:

1. There is no relationship between older adults' preference for the course location (e.g., senior center, community center, school or college building, public agency building), and the various socio-demographic variables.

2. There is no relationship between the interest of older adults for different types of vocational courses and various socio-demographic variables.

3. There is no relationship between older persons' perception of the adequacy of vocational education to meet their educational needs and the various socio-demographic variables.

4. There is no relationship between obstacles to continued formal education by older adults and the various socio-demographic variables.

5. There is no relationship between the type of problem experienced by older adults and the various socio-demographic variables.

RESEARCH METHODOLOGY

This research endeavor utilized the simplistic descriptive survey approach involving the administration of questionnaire to elderly citizers in selected senior centers. In such an approach, the primary mission of the research is to describe and interpret existing conditions, e.g., the educational needs and interests of older adults. Despite elements of a correlational nature, the study's overall orientation was the descriptive approach.

Population and Sample

The population for this study consisted of older adults (55 and over) who participate in programs or activities sponsored by senior centers. A random sample of 143 older adults was selected from a volunteer pool of older persons located at senior centers in the Commonwealth of Virginia. Thusly, the volunteer nature of the population from which the sample was extracted limits the external validity of the survey's findings to older adults in senior centers who are non-volunteers. However, it is speculated that, perhaps, this research can facilitate the planning for new programming attempts for the vocational education system to meet the educational and training needs of older Americans and should also provide a basis for further research in senior centers.

The respondents were approximately seventy-five percent female, mostly white Americans, presently married or widowed and twenty-two percent were at least high school graduates. A wide variety of occupations was represented, but with only a fairly small percentage falling in semi-skilled or unskilled categories.

The age distribution showed, except for 59 and below, a fairly large number in each group, although seventy-one percent of subjects were 65 and over. The range was from 55 to 99 with the average at slightly more than 69 years. Slightly more than forty-eight percent were 70 years of age or older.

DATA AND INSTRUMENTATION

Description of Instrument

Data collection for this study involved the use of a combination "structured-unstructured Needs Assessment Questionnaire which was designed to elicit information from older adults pertaining to their socio-demographic characteristics, barriers to participating in educational programs, problems as perceived by them, and the kind of course, length of training, location of course/training, and time of day and day of week to receive vocational training.

Several efforts were made to ensure that as reliable an instrument as possible was designed:

1. The initial draft of the instrument was pilot-tested by the researcher with ten elderly citizens at a senior center in Northern Virginia. Individual questions were checked for ambiguity, clarity, wording, and sequence. Some minor corrections were made and the final form of the instrument developed.

2. The reliability of the instrument was checked also by using the rationale equivalence method. This method of reliability estimates internal consistency by determining how all items on an instrument relate to all other items and to the total instrument. The total reliability coefficient was moderately high (.752).

Several efforts were also made to ensure initially that a valid Needs Assessment instrument was available or after the collection of the data to assess how valid was the instrument..

1. In the initial development of the instrument a review of the literature aided from a content validity view the inclusion of problem areas and obstacles to participation in formal courses.

2. A panel of persons including a vocational teacher, an adult and vocational administrator, an aging specialist and a coordinator of a

community education center further assisted in the content validity of the instrument.

Data Collection Procedure

The instrument was administered to each respondent by the senior center director or designate on an individual or group basis. For those elderly individuals who had some difficulty in reading and/or understanding the instrument, instructions were carefully read as well as other sections when warranted as requested by the participant. There was a potential instrumentation bias given that several older persons were dependent upon the interpretation of the instrument. Many older persons failed also to respond to all portion of the instrument (a problem which is discussed in the "implications section" of the paper). Following the administration of the instrument, each senior center director or designate returned the questionnaire to the researcher where upon each instrument was coded and prepared for computer analysis.

Statistical Analysis and Treatment of Data

The Chi Square Test of Significance was used in testing the study's hypotheses. The nominal characteristics of the data made this the appropriate statistical method to use. Statistical significance was reported when the probability value was equal to or less than .05 or ($p \leq .05$). Because non-directions were predicted for all hypotheses to be tested, the two-tailed test of significance was utilized. Data are reported primarily via tables showing frequencies and percentages of response .

PRESENTATION OF DATA

Results of Hypothesis Testing

NOTE: As a reminder to the reader, a nonparametric statistical test, the Chi Square Test of Significance was used to test each null hypothesis and rejection

occurred when $p \leq .05$.

HO_1: There is no relationship between older adults' preference for course location and the various socio-demographic variables.

No significant relationship was found to exist between an elderly person's preference for course location and socio-demographic variables. Thus, the null hypothesis was supported.

HO_2: There is no relationship between interest of older adults for different types of vocational courses and the various socio-demographic variables.

The results of the statistical testing of hypothesis two revealed a highly significant relationship between the interest of older adults in enrolling in different types of vocational courses and their sex, age, and educational attainment characteristics. The null hypothesis, therefore, was rejected.

Specifically, significant relationships were found to exist between 1) sex and interest in food services and nutrition (females showing a greater preference than males); 2) age and interest in crafts (those in the 60-64 age category demonstrating more preference than other age categories); 3) educational attainment and interest in enrolling in merchandising/sales (older adults having completed high school but lacking postsecondary education expressed the greatest interest in this vocational area); 4) educational attainment and interest in consumer and homemaking education (older adults having four years of college expressed preference for this vocational course); 5) sex and preference for enrollment in a carpentry course (males outnumbered females substantially in expressing a preference for carpentry); 6) age and food services and nutrition (elderly persons 70 and over preferred this course in comparison to the remaining age groups); 7) age and interest in electronics/computer-technician/electrical wiring (males preferred this type course significantly more than did females); 8) educational attainment and interest in taking a computer programming/data processing course (seniors having four years of college or advanced degrees

expressed the most interest in this type of course); 9) educational attainment and interest in clerical/office machines (older persons having completed only high school expressed the greatest interest in this vocational area); 10) educational attainment and interest in accounting/financing/bookkeeping (seniors having completed only high school or having completed a college education expressed the greatest interest for this vocational area); 11) age and interest in a printing course (elderly persons 60-64 and 70 and over expressed significant interests as compared to the other age groups for this vocational area); and, 12) educational attainment and interest in building trades/masonry/bricklaying (older adults completing only high school preferred this significantly more than those persons in other educational attainment categories).

HO_3 : There is no relationship between older persons' perception of the adequacy of vocational education to meet their educational needs and the various socio-demographic variables.

The results of the statistical testing provided no evidence of a relationship between the elderly's perception of the ability of vocational education to meet their educational needs and the various socio-demographic variables. However, as a group, older persons did indicate or reflect the general feeling, that vocational education could adequately meet their educational needs (40 percent expressed this viewpoint); ten percent were unconvinced of vocational education's suitability to meet their needs; slightly less than 20 percent were not aware of what vocational education has to offer older persons; and the remaining 30 percent did not respond to the question.

HO_4 : There is no relationship between obstacles to continued formal education by older adults and the various socio-demographic variables.

The results of the study showed no significant relationship between obstacles or barriers to older adults continued formal participation in education and the various socio-demographic variables (e.g., age, race, sex, marital status, educational attainment and profession/occupation). However, when viewed collectively, one-third of the sample of older adults cited cost as an obstacle to continued participation in educational programming. One-fifth or 20 percent indicated they were "too old to begin learning" as a primary deterrent to continued formal education and approximately 37 percent cited they "don't like to go out at night" as a major barrier to continued participation in formal education. The factor of "don't like to go out at night" supports Hiemstra's (1972) work but unlike Hiemstra and Eklund's (1969) writings, transportation was not cited as a major problem or reason inhibiting participation in formal education.

HO_5 : There is no relationship between the type of problem experienced by older adults and the various socio-demographic variables.

Data collected regarding what older persons perceive as problems for them were found to be significantly related to their age and educational attainment. The null hypothesis was rejected relative to the variables of age and educational attainment in relation to the problem areas confronting older persons. However, the null hypothesis was supported upon examining the realtionship between problem areas and the remaining socio-demographic characteristics (race, sex, marital status, profession/occupation, additional training, and living arrangement).

RESPONSE TO QUESTIONS TO BE ANSWERED

Question One

What are the major problems confronting older Americans?

Older Americans, when examined as a group rather than by special socio-demographic characteristics, did not express major concerns about typical problem areas of the elderly such as housing, transportation, getting more education, age discrimination, employment opportunities, leisure time activities, crime, nutrition and food. The two areas in which older persons felt are problems for them were income (43 percent and health care 42 percent).

Question Two

What is the preference of older adults for vocational/occupational areas or courses?

The preference of older adults for vocational/occupational courses in rank order were 1) crafts, 2) food services and nutrition, 3) human service worker, 4) consumer (tied) and homemaking education, 5) carpentry (tied) 6) electronics/electrical wiring (tied), 7) merchandising/sales, 8) computer programming/data processing, 9) accounting and bookkeeping, 10) printing, 11) auto mechanics, 12) clerical/office machines, 13) nursing, 14) ornamental horticulture, 15) architectural technology, and 16) photography/graphic communication. Important to note also is that 38 percent of the seniors did not report their preferences or interests for enrollment in vocational education courses.

Question Three

What is the preference of older adults for the location of vocational/educational courses?

Table 1 shows that 59 (41%) of the elderly respondents preferred taking vocational/educational courses at senior centers (this may reflect the fact that the data were collected from older persons presently participating in

TABLE 1

REPORTED PREFERENCES FOR THE LOCATION OF VOCATIONAL EDUCATION COURSES (n = 143)

Site	Preferred Location Given		
	Number	Percent	Rank
Senior Center	59	41	1
Community Center	19	13	2
School/College Facilities	13	9	5
Public Agency Bldgs. (library, city hall, etc.)	17	12	3
In-house via television, independent study, etc.	8	6	6
Plants, stores, other business locations	14	10	4
Other (church)	3	2	7
Non-Response	10	7	
TOTAL	143	100	

Senior Center activities. Following senior centers as the preferred site to take a course by rank order are 2)the community center, 3)public agency buildings (library, city hall, etc.), 4) plants, stores, other business locations, 5) school/college facilities, 6) in-house study, and 7) other (church).

Question Four

What is the preference of older Americans for the length of vocational training?

Table 2 reveals that the older population prefers short-term training programs/courses. Approximately 35 percent preferred the training period to be less than one year. Eighteen percent preferred that the length of time for vocational training be six weeks or less. As noted previously, there has been a consistent factor in this study, i.e., elderly respondents failed to respond appreciably to a number of questionnaire items (approximately 57 percent did not complete the filling out process on the length of training variable).

TABLE 2

PREFERENCE FOR LENGTH OF VOCATIONAL TRAINING PROGRAM (n = 143)

Length of Training	Preference		Rank
	Number	Percent	
Six Weeks or Less	25	19	1
Six Months or Less	13	10	2
One Year or Less	11	8	3
Two Year Certificate	7	5	4
Other (Every 9 months)	2	1	
Non-Response	85	57	
TOTAL	143	100	

Question Five

What is the preference for best time of day for older adult participation in educational/vocational education courses?

Table 3 clearly reveals the preference of older adults to be that of taking courses during the morning time (63% expressed a preference) followed in order of preference by afternoon (33 percent) and the evening (24 percent).

Question Six

What is the preference of elderly persons for best day of the week to participate in educational/vocational courses?

The preference for best day of the week to participate in educational/vocational courses as shown in Table 4 is the beginning of the week. Forty percent of those responding preferred Monday and Tuesday, Wednesday was the next choice of the older citizens. A somewhat unusual finding is that respondents preferred participating in a course on week-ends (Friday and Saturday) rather than on a Thursday.

FREE RESPONSE RESULTS

This section reports the responses of older adults to several open-ended or free response questions.

Question One

Do you have any special occupational or vocational skills you would like to see upgraded or developed more fully for part-time or full-time employment?

YES	NO	NO RESPONSE
40 (28%)	60 (42%)	43 (30%)

Types of skills to be upgraded and developed included:

- auto mechanics
- sales
- crafts
- electronics
- sewing, dressmaking
- woodwork
- computer programming
- home repairs

TABLE 3

PREFERENCE FOR BEST TIME OF DAY
FOR OLDER ADULT PARTICIPATION
IN EDUCATIONAL/VOCATIONAL
COURSES (n = 143)

	Preference		
Time of Day	Number	Percent	Rank
Morning	63	44	1
Afternoon	33	23	2
Evening	24	17	3
Non-Response	23	16	
TOTAL	143	100	

TABLE 4

PREFERENCE FOR BEST DAY TO
PARTICIPATE IN EDUCATIONAL
VOCATIONAL COURSES
(n = 143)

	Preference		
Day of Week	Number	Percent	Rank
Monday	37	26	1
Tuesday	20	14	2
Wednesday	19	13	3
Thursday	7	5	6
Friday	9	6	4.5
Saturday	9	6	4.5
Non-Response	42	29	
TOTAL	143	99	

Question Two

Do you have special occupational or vocational skills you would like to share with others?

YES	NO	NO RESPONSE
50 (35%)	40 (28%)	53 (37%)

Types of skills to be shared included:

- electronics
- brick laying
- sewing
- refrigeration/heating
- building trades
- child care
- restaurant management
- hotel management
- nursing
- crafts
- cooking
- floristry

Question Three

Do you believe occupational/vocational training programs can:

a. upgrade present job skills?

b. develop new job skills?

	YES	NO	NO RESPONSE
Upgrade:	68 (48%)	14 (10%)	61 (42%)
Develop new job skills:	61 (42%)	10 (7%)	72 (51%)

Reasons for stating "No" include:

- no interest
- fully trained
- bad health
- too old
- have vision problems
- lack of transportation

Observations on Conducting Research with an Elderly Sample

Problems arise when researchers who have not previously worked with aging populations, conduct research using elderly subjects. School-age populations are increasingly harder to work with, given much tighter controls placed on researchers with regard to parental permission, time taken from the regular curriculum, and relevance of the research to school-related problems.

Research with elderly populations presents quite different problems. The elderly are not, in general, captive populations who come to school on a daily basis, or who can reasonably be expected to be "turned on" to filling out a questionnaire. Nor are they subject to the same kind of authority as school children are by their teachers and principals. Several difficulties arose during this research study (e.g., failure of the subjects to fill out all sections of the questionnaire despite the presence of persons available to explain any items not totally clear) which have important implications for the generalization of research findings and future research efforts with elderly populations. This concern will be further discussed in the section on educational implications.

Summary

The problem of this study was to secure a better understanding of the interests and needs of older persons for vocational and technical education program. Additionally, the study examined general educational needs, problems and barriers affecting the participation of older adults in educational programs. Utilizing a Needs Assessment Questionnaire, data were collected from 143 Virginians, 55 years of age and older. A fairly random sample was obtained, although older persons participating in senior centers did not all have an equal and independent chance of being selected since the sample was extracted from a volunteer pool of older persons from a cross-section of senior centers in the commonwealth.

Older adults felt, though not overwhelmingly so, that vocational education could adequately meet their educational needs, upgrade their present occupational skills or develop new ones. Their preference for the type of vocational course included food services and nutrition, computer programming, auto mechanics, homemaking education, carpentry and printing.

The obstacles or barriers to continued participation in formal education/ educational programs identified most often were as follows: "cost", "I'm too old to begin learning", "I don't have enough energy and stamina", "don't like to go out at night", "I'm tired of schools and classrooms", and "no transportation available". Senior centers, by far, is the preference of elderly persons for the location of educational/vocational education courses. Older adults' preference for the course site to be in school and college facilities is very low. They prefer short-term vocational training (preferably six weeks or less). The time of day they prefer taking a course is the morning and the day of the week is Monday, followed by either Tuesday or Wednesday; however, no real preference was given for the remaining days of the week.

A significant relationship was found to exist between the interest of older adults for different types of vocational courses and age, sex,and educational attainment. Statistical significance was found also between the variables of age and educational attainment in relation to the type of problem being experienced by older persons (e.g., lack of money, poor health, lack of transportation and inadequate housing).

Conclusions

Based on the results of the study, the following conclusions were drawn:

1. Older Americans, generally speaking, do believe that vocational education can meet their educational needs, upgrade existing occupational skills and develop new ones.

2. Older adults' preference for vocational courses relate to those skills, competencies and knowledges which can improve aspects of their home life, health, avocational interests, and technical updating.
3. Older persons' self-evaluation based on long-standing myths and stereotypes about "being old" combined with transportation problems, activities offered at night and cost are critical factors limiting their participations in educational programs.
4. Many older adults lack a basic understanding and/or familiarity with vocational education, and therefore, lack some understanding of what vocational education can offer.
5. Older adults do not prefer long-term vocational training (e.g., more than six months).
6. More educational courses and activities, including vocational education courses should be offered in senior centers.
7. Older adults primary problem areas are related to income and health care.

Recommendations

Recommendation No. 1: That educators, specifically vocational educators, find new and non-traditional means for making educational and training opportunities available to the older adult.

Recommendation No. 2: That a national survey of the needs and interests of older adults for vocational and technical education be conducted in order to develop a broader data base to more effectively plan programs and research activities.

Recommendation No. 3: That, in an effort to increase the participation of older persons in vocational programs, consider the study's findings which suggest such programs and/or courses be developed on a short-term basis, be offered during the morning or early afternoon, preferably on a Monday, or at least

between Monday and Wednesday at a senior center or community center.

Recommendation No. 4: That vocational education consider the older person as a genuine clientele for which recruitment efforts will be targeted.

Recommendation No. 5: That more scholars in vocational education do research in and write about the potential and ability that are possible throughout life so that those vocational educators who still believe in the myths of older age can be helped to behave differently.

Recommendation No. 6: That vocational educators utilize the information in the free response section regarding the types of skills older adults feel can be upgraded or new ones developed in vocational education as a basis for realistic course planning.

Recommendation No. 7: That the information obtained on the types of skills older persons prefer sharing be used as a basis for planning, developing and implementing a volunteer vocational education program for older Americans.

Recommendation No. 8: That additional research be conducted to better understand whether these findings are applicable to older people in other geographical or senior center settings, or perhaps in a different environment where older persons are involved (e.g., the Senior Community Services Employment Program (SCSEP), Senior Companions, Foster Grandparents, and the Retired Senior Volunteers Program (RSVP).

Implications

Program Planning. --The implications of findings in this study for program planning are numerous. Vocational educators must now consider older persons as a special clientele with special needs and interests. This will become increasingly important as more retired persons move to residential centers, or become involved in senior center activities. The findings also revealed that elderly do have particular interests and needs that can be uniquely

met through a well-planned, realistically-based vocational education program.

Educators must continue to seek new and better answers, if educational programming for older adults are to be successful. Heimstra (1972) stated it another way:

> ...it must be the responsibility of committed professionals -practitioners and researchers alike - to make lifelong education a reality... (p. 108).

The finding that older adults prefer vocational education courses/ educational activities be located at a senior center had the built-in-bias of respondents being asked to select possible sites away from where they live or a center where they normally participate in programs designed for them. However, as encouraged by Hiemstra (1972), the lack of preference reported for activities in formal education institutions should be examined in future research.

The interest expressed for vocational/occupational courses or areas was varied. Almost any type of vocational course appeared to meet someone's need in the study. The implications for future program planning must be considered given the preference reported for such a vast array of course offerings.

Finally, the results of the study should serve to assist the Virginia State Department of Education, Division of Vocational and Adult Education, and the Virginia Office on Aging in increasing educational opportunities for older adults in the Commonwealth. Hopefully, other states will find this reported information useful as a basis for implementing new initiatives for vocational education to serve older Americans.

Methodological Considerations. -- There are a few methodological implications as a result of this study. While a random sample is desirable goal (and more easily attained in a school population), it is almost an impossible task to achieve this desired goal with an elderly population. Even working through senior centers, where eledely persons regularly attend meetings, randomization

is not always feasible. Center Directors are unwilling to release membership lists, and there is a fear that researchers funded by governmental or State agencies are in fact working for the government. In the end, it was necessary to use a population of senior volunteers from which the sample was selected. Also, the administration of a needs assessment questionnaire has some real strengths that should be considered by researchers. At the same time, this researcher wonders if the high incidence of non-response to portions of the questionnaire can be attributed to lack of instrument sophistication for the population in question. Perhaps the use of probing interview techniques, follow-up visits and other similar techniques, including training the staff person at the center on appropriate procedures in the administration of the questionnaire, possibly would have resulted in a greater response to more items. Without a doubt, techniques and/or procedures for collecting data directly from elderly citizens must be continuously developed, refined, and shared with practitioners and researchers.

REFERENCES

Eklund, L. Aging and the Field of Education. In J.W. Riley, Jr. & M.E. Johnson (Eds.), Aging and Society. New York: Russell Sage Foundation, 1969.

Hiemstra, R. "Continuing Education for the Aged: A Survey of Needs and Interests of Older Persons: Adult Education: 1972,22 100-109.

Hiemstra, R. The Older Adult and Learning. Ames, Iowa: Adult Extension Education Section, Iowa State University, 1975.

Hiemstra, R. "The Older Adult and Learning Participant." Contemporary Educational Psychology, 1980, 5, 346-362.

Londoner, C.A. "Survival Needs of the Aged: Implications for Program Planning." International Journal of Aging and Human Development, 1971, 2, 113-117.

Peterson, D.A. "Education and the Older American," Adult Leadership, XIX (February, 1971), 263.

Sheppard, N.A. A Survey and Analysis of Attitudes, Available Resources, Capabilities and Potentials of Serving the Aged in Vocational Education. Blacksburg: VPI & SU, 1975, (ED 112 093).

Sheppard, N.A. "The Response of Higher Education tc Older Adults: A Federal Perspective." Alternative Higher Education, 1980 5 (1), 7-17.

U.S. Commission on Civil Rights. The Age Discrimination Study. Washington, D.C.: 1977.

U.S. Department of Labor and U.S. Department of Health, Education and Welfare. Employment and Training Report of the President. Washington, D.C.: U.S. Government Printing Office, 1978.